MODIS sensor Working Group (MsWG) Meeting Summary August 31, 2005

Attendance: Bill Barnes, Vincent Chiang, Gene Eplee, James Kuyper, Gerhard Meister, Chris Moeller, Junqiang Sun, Gary Toller, Eric Vermote, Zhengming Wan, Aisheng Wu, Jack Xiong

Scheduled Agenda

Item 1: Recent L1B LUT delivery

- Terra special LUT – V5.0.6.7_OC (Aug 30) to Oceans Group.
  JX – This is a special LUT requested by Bob (NRL) and Oceans group for 250m Oceans Color products testing, not for general users. In this LUT, Band 2 detectors 29 and 30 (instead of 28 and 29 stated in today's handout) are flagged as dead detectors in the QA such that their values will be the interpolation between adjacent good detectors.

Item 2: Instrument status

- Terra SSR encountered a PWA failure containing 2 MODIS supersets, #54 and #55, on Aug 26 (2005/238). All data written to or played back from this SS pair is lost (~ from 23:09 to 23:23). These SS have been moved to BAD SS list. MODIS buffer capacity is at 32 SS after the incident, 6% down since last defined 34 SS on 2004/213. Flight operation is looking into the option of recycling the SSR. Earlier this year, NASA HQ disapproved the SSR recycling plan for safety concern (*see MsWG 1/26/05*).
- Terra Band 27 detector 7 (in Product Order) b1 increased (gain decreased) about 3% in granule 2005/240 14:00. Terra was heading south over the SAA region in the day time orbit (orbit# 30293) when it happened. This should not impact too much on TEB because it is calibrated scan by scan.
- A few minutes data loss from the DB last week, not an issue to the regular data stream.

Around the Table

Participant: **Gerhard Meister** (Oceans) – On the RSR issue
We started looking at high resolution Oceans products. We want to apply total RSR (in-band and out-of-band) to the products. Can we get Aqua's out-of-band RSR? And how about the in-band RSR, which have the same center wavelength for all detectors?
JX – I discussed with SBRS but haven't got the Aqua's final IB and OOB normalization factor from James Young (SBRS). I'll try to get the information from them.
JX – There is a "smile" effect of the center wavelength profile across detectors by using the SpMA because of the spectral variation along the SpMA exit slit. Scientists agreed to make the center wavelength the same but keep the shape of each detector. For higher resolution RSR measurements, some detectors results are using other detectors' due to test problems.
GM – I agree that the center wavelength should be the same.

Participant: **Gene Eplee** (Oceans) – I am working on the Lunar ROLO model and would like to get the MODIS lunar granule information from MCST.
JX – Junqiang can send you the information.

Participant: **James Kuyper** (L1B) – Other than the special LUT, there will be an Aqua forward update today.

Participant: **Chris Moeller** (Atmosphere) – I sent you a Terra granule time of Lake Tahoe for warm-up and cool-down coefficients comparison test. We continue looking at AIRS and MODIS comparison. If you have the RSR uncertainty estimate, please send it to me.
JX – Che can provide you the pre-launch estimated uncertainty (mainly by SpMA).

Next MsWG meeting scheduled on September 21, 2005